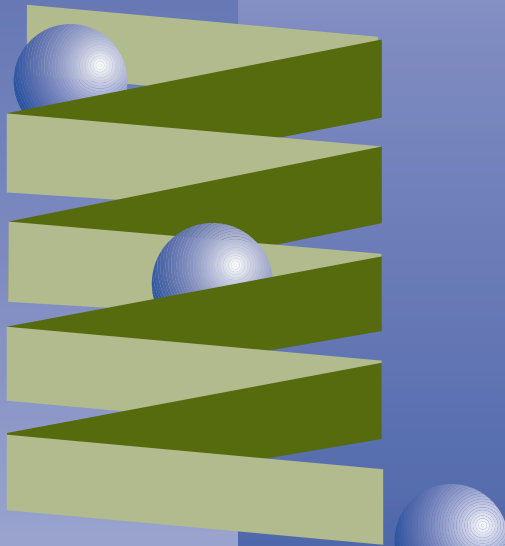


# COMPETITIVENESS AND OPPORTUNITY

**Public/Private Industry  
Partnerships That Work**



***Washington State  
Leads the Way***

## Skill Panels Respond to Skilled Worker Shortage

During the last two decades, Washington has seen dramatic growth in knowledge-based industries. Nearly all industries must invest in new technologies to stay competitive. In state and national surveys, employers say they continue to face shortages of skilled workers, despite the recession. Even more troubling, employers say that limited access to a skilled workforce is by far the largest barrier to expansion over the next five years. As the economy begins to recover, workers must be ready to excel in recovering industries. Business, labor, and education have crucial roles in assuring that workers have the skills necessary to keep Washington State competitive. Their active participation in skill panels assures that education and training programs give students the skills they need to ensure Washington's employers' competitive edge.

Initiated by Governor Locke and the the 2000 Legislature, skill panels engage business and industry to devise strategies to close the skill gaps in Washington State. These industry-led panels create public-private partnerships among business and labor representatives from a specific industry and the educators serving that industry. Together, they work to provide:

- Workers with better skills, jobs, and career opportunities.
- Employers with more efficiency, less turnover, and higher profits.
- Expansion of skill standards to meet employer needs.
- Educational programs that address key economic clusters and on-the-job learning strategies.
- Local and state information about employers' skill needs.
- Policy recommendations based on real-time information.

# Workforce and Economic Development Innovations

## Innovation

Washington State is nationally known for linking economic and workforce development by strategically investing in industry skill panels. Comprised of business, labor, and education, industry skill panels are “think tanks” that focus on the existing and future workforce development needs in key industries. The panels provide forums for discussion with multiple stakeholders who are vested in a particular industry. Skill panels create industry-driven teams that find solutions for short-, mid-, and long-term challenges and opportunities for an industry’s workforce. They foster an environment of knowledge sharing among individuals who make recommendations for immediate and future action to a local region, the state, or the Legislature for policy changes necessary to keep an industry’s workforce competitive.

In our knowledge-based and ever-changing economy, the public and private sector often have conflicting priorities. Industry skill panels look for common ground, establish common workforce development goals, and implement real-time results for mutual benefit. These cross-functional teams share in the relationship and accountability of a partnership. As the panel matures, partners become more knowledgeable about the industry, staying current with the latest collective developments. In so doing, partners gain a deeper understanding of their own organizations and how other partners perceive them. As they work together, partners get to know each other’s organizations and build strong relationships. In successful skill panels, public and private partners build relationships that benefit all partners. The lines between specific organizations blur so people see each partner as an extension of their own organizations: this is a clear indicator of success. Such partnerships foster innovation and give industries and public partners the opportunity to be proactive instead of reactive—addressing changing workforce development needs quickly and competently.

*“Human capital and innovation are fundamental to gaining a competitive advantage in the modern economy. The success of companies, industries, and states increasingly depends on an educated, flexible workforce, their access to new technology, and their ability to rapidly innovate.”*

- Governor’s Competitiveness Council, “Executive Summary,” 2002

## Leadership

One key ingredient to successful skill panels is leadership. Industry skill panels create leaders of many kinds. Leadership in skill panels is shared among partners based on the goal or task being performed. If curricula will be created or updated, industry leaders must be able to effectively communicate what new skills or sets of skills are needed. Workers contribute because of their hands-on expertise. “Industry champions,” professionals in a business or business association who understand, and have passion for, linking public and private sector workforce and economic development goals are emerging within all skill panels. They provide a critical link between company CEOs, workers, education, and government.

*“For partnering to work means focusing on the process, not personalities. In long-term alliances, you’re going to see key players come and go. Not only in your planning process but in your operations process also. If you can keep the focus on the process and keep the level of communications high, you’re going to be successful. If you put the focus on personalities and a key player leaves, then you may be setting yourself up for failure.”*

– Joe McGee, INTEL, and Randa Rosenblum, Federal Express, from *Getting Partnering Right*, Rackham, Friedman & Ruff, McGraw Hill, 1996

Leadership qualities in a skill panel partnership encompass some of the following:

- A commitment to change
- Systems thinking
- An ability to connect research results and field experience
- A deep knowledge of all stakeholders
- A strong focus on process and mutual goals, rather than personalities
- An ability to show stakeholders where they have common ground
- A high level of communication skills

Partnering comes down to effective communication, openness with one another, and defining clear expectations. Partners must evaluate their own capabilities, assuring they do not over- or under-estimate what they can deliver. A lot of learning and exchange of ideas and information will happen when a partnership is successful.

### **Trends**

Three types of skill panels are emerging.

- Crisis Driven—i.e., Agriculture/Food Processing, Health Care, and Aerospace
- Industries in Transition—i.e., Information Technology, Marine, Construction, Electronics, Manufacturing, and Energy
- Emerging Industries—i.e., Game Software Development and Biotechnology

Although Washington’s skill panels are less than three years old, a few of the tangible results include:

- The development of a variety of tools, products, and materials such as curricula, skill standards, assessment tools, and new apprenticeship programs.

- A renewed interest from local media on workforce and economic development topics. Many skill panels have had their efforts highlighted in the press, helping to promote the public workforce system to employers and workers, as well as to promote employers' and workers' needs.
- Industrial or regionally centered research that has provided credible information for both the public and private sector to use to find solutions for skill gaps.
- Shared instructional design and curricula, resulting in the ability of industries with multiple locations to use courses that are consistent throughout the state.

### **Investments**

Washington State investment in skill panels is relatively small. The investment is intended to be seed money to assist an industry in a local region. Facilitators of skill panels are local workforce development councils, community colleges, business associations, and community-based organizations. Virtually all skill panels have used funding from the Workforce Training and Education Coordinating Board to leverage financial support from other public or private resources. Moreover, private investments are being made on a continuing basis. These investments take the form of cash, executive time, wages, benefits, and travel. Skill panels are important strategic investments, aligning workforce and economic development strategies.

This is what seed money is intended to do—provide a jumpstart for an idea, in this case identifying solutions for providing skilled workers in Washington State to keep and attract new business. Linkages are being developed beyond the initial investment. Over the long term, actions from industries and workforce and economic development entities will speak to the power of these initial investments.

### **The Impact on Business**

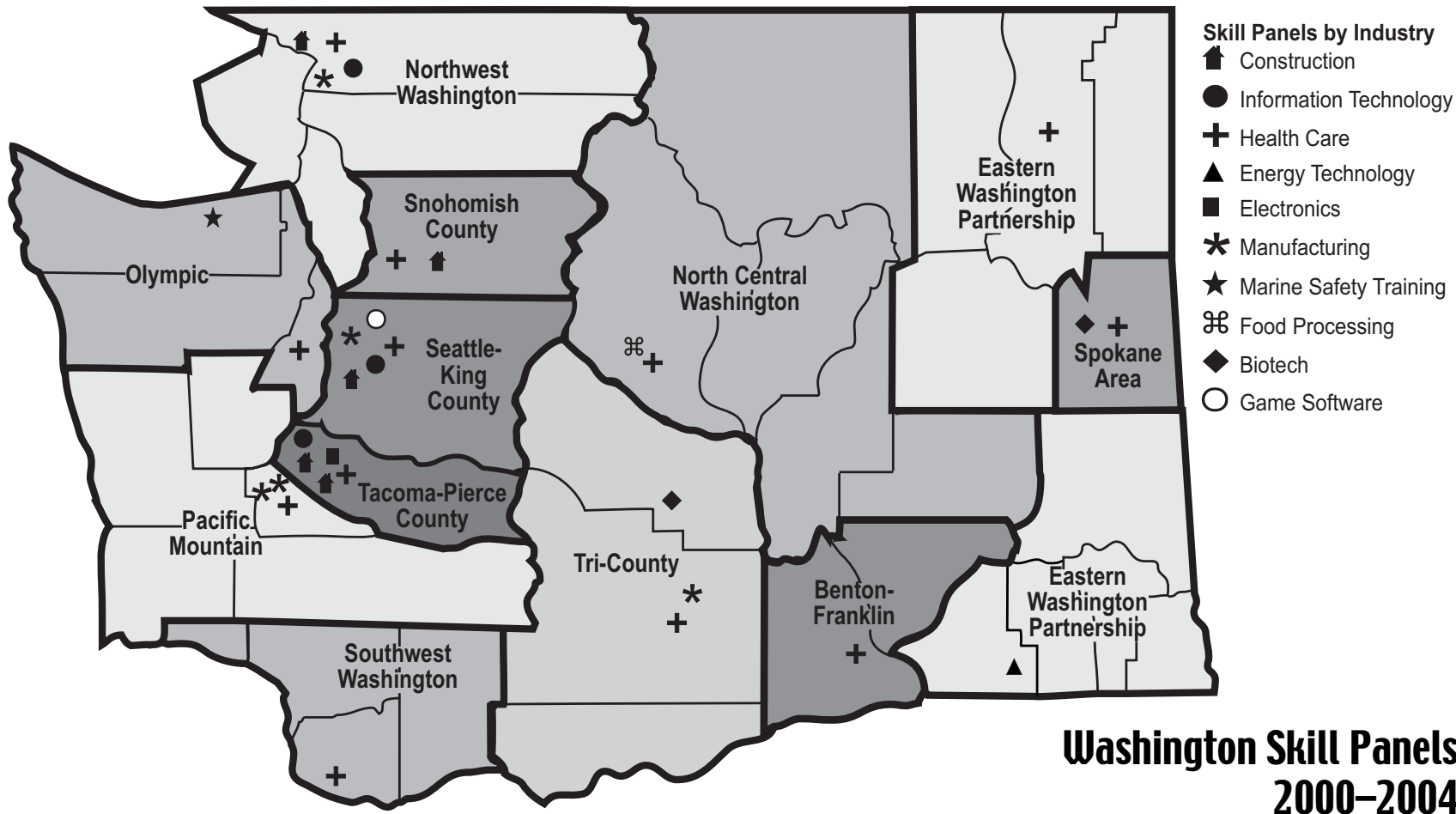
Consumers continually demand more for their money. They want greater variety and better quality—and they do not want to wait. Costs rise for business as technology changes to meet these demands. When times get tough, business spending for training and education shrinks. Business must do more with less.

In skill panels, educators and businesses seek advice from each other in order to produce people trained in the most current skills who are ready to apply those skills quickly. They leverage training dollars still available in companies so more workers can benefit from learning new skills needed by employers. By engaging business in partnerships, the public sector has the advantage of knowing more intimately what is

needed in real time to meet real needs. Technology for all industries has forced every job to change. Businesses and their partners cannot stand still and continue to do what they have always done. Public/private networks built within skill panels give participating companies a competitive advantage.

### **The Future**

It is important to understand that not all skill panels remain in their original form. The work of each skill panel is dictated by industry. Some of the initial work of skill panels has emerged in other local or regional initiatives. In a recent survey of workforce development councils, some local leaders plan to add a new skill panel each year to serve more industries. Others report that skill panels are the best possible marketing tool they have to engage business in the public workforce system. In 2003, the Governor's Joint Economic Vitality Cabinet recommended that three industry clusters—marine trades, agriculture and food processing, and biotechnology—participate in a new model of skill panel to include the entire supply chain: all the businesses that support each industry. This new "cluster-based" model is intended to build on local and state efforts already in place and engage state agencies beyond workforce and economic development. All of the selected industries were initially funded as industry skill panels. The work that took place in those initial panels is being used and expanded within the new models through 2004. This initiative—linking public sector resources and private sector expertise—is a key tool to ensure Washington State's competitiveness in a global economy.



# Construction

## Tacoma–Pierce County Workforce Development Council

When the Tacoma-Pierce County Workforce Development Council identified construction as one of its five high-demand industries, it had substantial information supporting the formation of a Construction Skill Panel. In 2001, the University of Washington released an employment and economic impact study, finding more than 206,000 workers were employed by contractors, construction services, and construction material suppliers statewide. This figure accounts for 7.7 percent of Washington's workforce, with a total payroll in 2001 of \$8.3 billion. Further data from the Occupational Employment and Wage Estimates shows that Pierce County accounts for 10 percent of the state's construction-related employment, which translates to 15,380 positions offering the third highest average wage of \$36,097. These figures, however, do not account for the major workforce shortage anticipated in Pierce County over the next five to 10 years, when 8,720 of the currently employed construction trades professionals are expected to retire.

Considering these statistics, the Pierce County Construction Partnership, with over 48 members representing business, construction associations, labor, apprenticeship, government, economic development, and education, is addressing the primary challenge of an aging workforce with a diminishing pipeline of trained workers. It is also exploring additional challenges unique to construction, including a poor image, the cyclical nature of the industry, working conditions, and physical demands.

### Results

- Five-year Pierce County Construction Partnership strategic plan.
- Labor market survey and analysis of construction-related employment in Pierce County and surrounding region.
- Apprenticeship Fair with major area employers, labor, and the Pierce County Building Trades Council.
- Construction career pathways with local training options.
- "Get Electrified" School-to-Apprenticeship summer program with Pierce County schools and the Southwest Washington Electrical Joint Apprenticeship Training Committee.
- Architecture, Construction, and Engineering (ACE) magnet school program with the Puyallup School District offered as a three-year block course offering credits in Math, English, and Construction.

### Next Steps

- Exploration of partnerships with construction organizations (American Institute of Architects and the National Association of Women in Construction).
- Vocational English-as-a-Second Language and bilingual workplace communication courses sponsored by the construction partnership, including:
  - Applied Spanish Training for supervisors piloted with Rushforth Construction.

- English/Management training for Spanish-speaking construction workers and Bilingual Instruction for carpenters currently being developed with local colleges.
- Building Your Career awareness campaign to promote the Pierce County construction industry.
- Development of a public policy team, combining efforts with the Health Services Career Council and Pierce County Careers Connection to improve career awareness in K-12 schools.

### **Want to Know More?**

For more information, contact Linda Nguyen at the Tacoma-Pierce County Workforce Development Council, 253-591-5810 or <Inguyen@pic.tacoma.wa.us>.

A 2002 census of high-tech companies identified 75 high-tech and 140 high-tech related companies in the South Puget Sound area. More than 75 percent of these companies, along with Pierce and Kitsap County military bases, depend on electronics technicians to maintain production processes, facility operations, and equipment service. Unfortunately, there continues to be a shortage of skilled electronics technicians to fill regional demand. The Bureau of Labor Statistics projects that industry demand for electronics technicians in Washington State will increase by 25 percent from 4,800 in 1998 to 6,050 in 2008. Electronics training programs at community and technical colleges have not been able to keep up with new technologies and the demand for more highly specialized electronics workers. Eleven employers and five community and technical colleges formed a skill panel to evaluate and update the training programs.

### Results

- Electronics market research study for Pierce County.
- Drafts of skill standards for two occupational clusters: The Industrial Systems and Electronics Occupational Cluster and Information/Communications Systems Electronics Occupational Cluster.
- Electronics program revisions for two school districts and four community and technical colleges.
- Identification of core sets of competencies shared by both information technology (IT) and electronics occupations.

### Next Steps

- Core competency requirements—a single set of competencies to be taught to all potential electronics occupation workers.
- Electronics marketing and outreach to high school students by launching an “Ambassador” program.
- Investigation of the relationship between training workers for IT and electronics occupations to prevent duplication of effort.
- Additional outreach to industry.
- Electronics skill standards.

### Want to Know More?

For more information, contact Lisa Pletcher at the Pierce County Careers Connection, 253-984-6002, <lpletcher@pc3connect.org>, or visit their Web site at <[www.pc3connect.org](http://www.pc3connect.org)>.

Washington's ability to compete in the global economy of the 21st century depends on our ability to carry out an energy strategy that will ensure relatively low-cost and reliable electricity. For this reason, the 2002 Washington State Competitiveness Council recommended that the Pacific Northwest should increase electrical transmission lines to meet expected growth in energy demand. Walla Walla is the home to several energy-related organizations. The district office of the U.S. Army Corps of Engineers is located in Walla Walla. Employing about 700 people, the Corps operates five multipurpose hydropower projects in Washington, Oregon, and Idaho. The Army Corps is also working with the Department of Energy in restoration efforts at the Hanford Nuclear Reservation. Walla Walla serves as the Snake River area headquarters for the Bonneville Power Administration, the federal power marketing agency. The Walla Walla office employs 45 people. The area also serves as the growing "stateline wind energy" hub. The Walla Walla Energy Skill Panel was established to enhance the availability of skilled technicians for the energy industry in southeastern Washington by designing appropriate and timely training. This skill panel is comprised of workforce development, business, industry, and labor leaders in southeastern Washington representing the areas of energy production, transmission, conservation, and consumption.

### Results

- Market analysis of current and future technical workforce needs in the region's energy industry.
- Energy Systems Technology Skill Standards.
- Energy Systems Technology curriculum and assessment tools.

### Next Steps

- Industrial electrician instructional program at Walla Walla Community College to begin in 2004.
- Two instructional program strands emphasizing high voltage electrical motors and instrumentation.
- Alignment with existing apprenticeship programs in the energy industry.
- Additional professional training opportunities for incumbent workers.

### Want to Know More?

For more information, contact Don Miller at Walla Walla Community College, 509-527-4639, <dona1d.miller@wwcc.edu>, or visit their Web site at <[www.wwcc.edu](http://www.wwcc.edu)>.

# Game Software Development

## Lake Washington Technical College

Washington's game software development industry has grown at a steady pace over the last two decades. Game development is a new field with very demanding and specific job skill requirements. Companies involved in creating game software and related products struggle to hire sufficient numbers of skilled workers to meet production schedules. Game development firms employ large numbers of specialized workers divided into two skill categories—programmers and production workers. The programming staff create the software engines that drive the games, while the technical artists create all game content. While software development teams have remained similar in size for an average game title, the technical art staff has been steadily growing larger. As games get bigger, more technical artists are required to build them. To respond to this demand, Lake Washington Technical College and Mesmer Animation Labs established a skill panel comprised of game developers, several software corporations, four colleges and other educators, and the Seattle-King County Workforce Development Council.

- Professionally-driven internship.
- Six complete courseware modules to address entry-level skills.

### Next Steps

- Regional game “industry cluster” labor market analysis.
- Strategies to address barriers to expanding high-demand programs at educational institutions and recruiting into the industry.
- Assessment tools to identify skill gaps, skill barriers, individual training plans, basic skill needs, performance measurements, and technical skills.
- Marketing plan and associated marketing materials.

### Want to Know More?

For more information, contact Frank Agnello at Lake Washington Technical College, 360-561-4364, <frankagnello@comcast.net>, or visit their Web site at <www.lwtc.ctc.edu>.

### Results

- Three focus groups of hands-on professionals to itemize the criteria used in the workplace to assess work skills.
- Information Technology-Digital Media Advanced Skill Standards for Electronic Game Content Production for entry-level workers.

# Health Care

## Washington State's 12 Skill Panels

Washington State is facing severe shortages of health care workers in nearly all health professions. This shortage threatens the quality and accessibility of health care, the financial stability of the health services industry, and the economic vitality of the state. In 2002, the state Workforce Training and Education Coordinating Board (WTECB) convened the Health Care Personnel Shortage Task Force. The Task Force drew from local, state, and national experiences to develop a statewide plan for the Legislature, state and local agencies, educators, labor, employers, and workers. The plan was published in the January 2003, *Health Care Personnel Shortage: Crisis or Opportunity?* and is available on line at <[www.wtb.wa.gov](http://www.wtb.wa.gov)>. In 2003, the Legislature asked WTECB to continue to convene health workforce leaders to monitor progress on the state plan.

In its report, the Task Force recommended that WTECB provide continuing support to current health care skill panels and expand the formation of panels to cover all 12 workforce development areas. This ensures that all areas of the state can benefit from collaborations among the health industry and educators. Skill panels provide an effective means to identify regional health personnel shortages and develop strategies to address them. The number of partners working on these panels is growing rapidly and currently includes health care employers such as hospitals and clinics, community and technical colleges, and organized labor. As of August 2003, all 12 workforce development councils have active health care skill panels. The newest health care skill panels are in the

workforce development areas of Spokane, North Central (Adams, Chelan, Douglas, Grant, and Okanogan counties), Eastern Washington Partnership (Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Walla Walla, and Whitman counties), and Tri-County (Kittitas, Klickitat, and Yakima counties).

### Results

- Regional labor market data drawn from industry surveys and covering specific occupational shortages and skill gaps.
- Partnerships with K-12 and postsecondary education to promote health and allied occupations to high school students.
- Marketing of employer tuition reimbursement opportunities and tuition advance funds.
- Leveraging of private and public funding to expand community and technical college health care classes.
- Development of customized training programs for entry-level workers, and bilingual/limited English-speaking populations.
- Expansion of clinical training site capacity and coordination.
- New upgrade training options such as Licensed Practitioner Nurse (LPN) to Registered Nurse (RN) using distance learning programs.
- Web sites to link potential and incumbent workers to the health care career pipeline.

- New labor/management committees established in Pierce County to create the Health Unit Coordinator and Computed Tomography/Magnetic Resonance Imaging apprenticeships approved by the Washington State Apprenticeship and Training Council.
- New radiological technology program offered by a consortia of community and technical colleges, hospitals, and clinics in King County and northwest Washington counties.

### Next Steps

- Focus on expanding health care education and training programs through federal, state, and private funding.
- Development of new training options such as LPN to RN upgrade using distance learning.
- Expansion of health care apprenticeship programs.
- Additional financial aid opportunities for incumbent workers.
- Expansion of clinical training site capacity and coordination.
- Partnerships with high school career counselors, health teachers, and career and technical education directors to promote health occupations.

### Want to Know More?

For statewide information, contact Madeleine Thompson at the Workforce Training and Education Coordinating Board, 360-753-5653 or <[mthompson@wtb.wa.gov](mailto:mthompson@wtb.wa.gov)>.

### Health Care Skill Panel Coordination and Support

Western Washington Area  
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Terry Tatko 206-441-7137  
[terrytatwwahec@qwest.net](mailto:terrytatwwahec@qwest.net)

Eastern Washington  
Bettie Rundlett 509-358-7646  
[rundlett@wsu.edu](mailto:rundlett@wsu.edu)

### Skill Panel Contacts at Workforce Development Councils (WDCs)

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Donna Noski 509-734-5980  
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Eastern Washington Partnership WDC  
Tom O'Brien 509-684-8421  
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Tri-County WDC  
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# Information Technology

## Pierce County Careers Connection

In 2003, there were 10.3 million information technology (IT) jobs in the nation. Although software companies hire many IT workers, nine out of ten are employed by banks, insurance companies, manufacturing firms, or other non-IT businesses. With its large government, trade, and manufacturing sectors, Pierce County's economy includes a healthy number of IT producers and workers. Despite the recent downturn in IT employment, employers continue to complain that they cannot find candidates with the necessary skills and experience. Pierce County Careers Connection created a panel of 10 industry leaders to provide guidance and expertise to Pierce County high school, college, and university IT programs as they increase their capacity to provide high-quality workforce and education training programs.

### Results

- Census and labor market analysis of Pierce County's IT industry.
- Eleven articulation agreements enabling students to transfer IT credits from high school to community colleges and four-year universities successfully.
- IT career guide given to 34,000 Pierce County students.
- Recruitment guide to attract people of color, young women, and nontraditional youth into IT careers.
- Cross-training to over 25 teachers in high-demand IT career clusters.

- InternMatch, a free online internship system (<[www.InternMatch.org](http://www.InternMatch.org)>).
- Feasibility report for IT apprenticeship program in Pierce County.

### Next Steps

Seamless pathway from high school IT course work to college course work to employment.

- Increased IT work-based learning opportunities in Pierce County.
- An IT apprenticeship program in Pierce County.

### Want to Know More?

For more information, contact Lisa Pletcher at the Pierce County Careers Connection, 253-984-6002, <[lpletcher@pc3connect.org](mailto:lpletcher@pc3connect.org)>, or visit their Web site at <[www.pc3connect.org](http://www.pc3connect.org)>.

# Information Technology

RATEC

At the end of the year 2000, Washington's information technology-based industries accounted for the largest share of employment, business activity, and labor income of any major sector in the state's economic base. In the past several years, a variety of economic and social factors led to a downturn with at least 10,000 jobs lost. Despite this loss, the information technology (IT) sector employs more workers today than it did in 1999. Current IT employment levels have stabilized at about 56,000 jobs. Founded in 1994, RATEC (formerly the Regional Advanced Technology Education Consortium) was formed to meet the continuous need to evaluate the rapidly changing IT workforce demands and facilitate solutions to support an economically competitive region. RATEC has evolved to include both IT creators and IT enabled organizations in its work.

Today, the application of IT spans nearly all sectors. Industries such as agriculture, government, health care, financial services, and biotechnology employ a larger percentage of IT workers than the traditional IT software development sector. Technology-enabled organizations use technology not only to improve processes and efficiency, but also to develop new products and services that will enable Washington companies to remain viable in a global economy. A well educated and trained IT workforce is an essential component to economic recovery and global competitiveness for all organizations, whether they are technology creators or technology enabled.

## Results

- "Reconceptualizing a Workforce: Challenges and Opportunities for Education and Industry." This research was conducted to investigate current and future IT skill demands across business sectors and our state's postsecondary educational systems' ability to meet those needs through IT-related programs and training. This report encompasses information regarding:
  - Opportunities and barriers to IT-related postsecondary education programs.
  - Future business trends for technology innovation and integration.
  - Statewide cross-sector industry data on demand, barriers, and the future of IT skills and educational programs.
- In partnership with Edmonds, Bellevue, and Pierce Community Colleges, RATEC developed a Prior Learning Assessment Portfolio for Information Technology (PLA). PLA is a model that enables community and technical college students to be granted credit based on an assessment of their knowledge and previous work experience.

## Next Steps

- Manual outlining alternatives for developing IT skills, illustrating the integration of IT skills across a variety of occupations.
- Online knowledge management system that provides access to information on IT workforce issues, career pathways, emerging IT skill demands, parent/student resources, and trends in technology innovation and business practices.

- In partnership with the Seattle-area chapter of the Society for Information Management (<[www.seasim.org](http://www.seasim.org)>), RATEC will launch a workforce forum in February 2004 to explore business and technology trends that affect IT education and workforce demands.

### **Want to Know More?**

For more information, contact Joy Howland at 425-564-2192, <[jhowland@bcc.ctc.edu](mailto:jhowland@bcc.ctc.edu)>, or visit RATEC's Web site at <[www.rateconline.org](http://www.rateconline.org)>.

# Manufacturing

## Institute for Workforce Development and Sustainability

Accounting for 13 percent of all state employment, which represents over 300,000 workers and 16 percent total wages in the state, manufacturing is a vital and historic component of Washington's economy. In fact, manufacturing continues to support high-wage jobs: the median hourly wage in 2000 was \$18.62, and average manufacturing wages for 2001 exceeded \$48,000 per year, which is the highest of all major industry groups. In the same year, the state's manufacturing employees collectively earned over \$16.4 billion. Manufacturing generates a large number of additional jobs in Washington's economy with large supplier, distribution, and support chain networks.

Manufacturing has experienced an overall decline in recent years. However, relatively little is known about the specific effects of this decline in different industry sectors and economic regions. Fluctuations in manufacturing competitiveness can vary greatly by sector, product type, and market forces. The Association of Washington Business' (AWB) nonprofit arm, the Institute for Workforce Development and Economic Sustainability (IWDES), convened an advisory group to explore opportunities to guide a comprehensive review of manufacturing. IWDES contracted with the Washington State University Social and Economic Sciences Research Center to complete a comprehensive review of manufacturing across 11 subsectors, analyzing trends in small, midsized, and large business, as well as reviewing rural and urban-based manufacturing.

### Results

"Manufacturing in Washington State, 1990-2002: Trends and Implications for the Industry and State" including conclusions and recommendations about future manufacturing viability in Washington State, which in turn has:

- Provided employment and wage data analysis for 11 of the state's manufacturing subsectors.
- Supported other skill panels connected to the manufacturing industry.
- Influenced proposed formation of a Manufacturing Advisory Group within AWB.

### Next Steps

- A two-year Workforce Innovations Network (WINS) grant to build business membership and engagement with the 12 workforce development councils. WINS is a partnership of the Center for Workforce Success of the Manufacturing Institute, an affiliate of the National Association of Manufacturers; the Center for Workforce Preparation, a nonprofit affiliate of the U.S. Chamber of Commerce; and Jobs for the Future.
- A partnership with Job Corps leaders to promote business involvement with the four centers located in Washington State.

### Want to Know More?

For more information, contact Mike Hudson at the Institute for Workforce Development and Sustainability, 360-943-1600 or visit their Web site at <[www.awb.org](http://www.awb.org)>.

# Manufacturing

## Shoreline Community College

**M**anufacturing accounts for nearly all of the Puget Sound region's exports, which make up 87 percent of the state's total exports. Washington State is ranked fifth among states in total exports to the world, making Puget Sound manufacturing vitally important to the nation's balance of trade. In 2000, the Kent Chamber of Commerce contracted with the Herbert Research group to develop a profile of industries in the Kent Valley, determine their productivity, and identify factors that would either preclude them from growth, or cause them to leave the region. This study found not only that over 20 percent of the companies identified a lack of qualified employees as one of their top three constraints to growth, but also that same companies projected 20.7 percent expansion in employment in the next three years.

The Manufacturing Skill Panel was formed to take a closer look at the tremendous workforce needs specific to the Kent area and also in the greater King County and Puget Sound region. In particular, this skill panel convened 12 members of the Kent Chamber of Commerce to focus on the challenges common to small to mid-sized employers across manufacturing sectors. This group developed strategies to build a workforce training system more responsive to the specific needs of small or mid-sized manufacturing employers located in the Kent area; defined skill requirements and customized training for the community and technical college system; and developed better tools to determine worker skill attainment.

### Results

- Alignment of local workforce needs with the Manufacturing Technology Advisory Group (MTAG) national skill standards and WorkKeys assessment tools across the region.
- Modularized manufacturing curriculum based on MTAG skill standards for local community and technical colleges.
- Web site promoting the Shoreline Community College Work Skills Assessment Center, including links to online training programs, professional certification and licensure exams, and WorkKeys workplace skills assessments.
- Marketing campaign promoting Assessment Center as a resource for small and mid-sized manufacturers located throughout the region.
- Partnership with Renton WorkSource to assess and recruit potential employees.

### Next Steps

A \$460,000 two-year grant from the State Board for Community and Technical Colleges to support the Center for Manufacturing Excellence at Shoreline Community College. With industry support, this center will work across manufacturing sectors to provide a modularized manufacturing curriculum system, based on a common core curriculum and skill standards; a system of elective certificates that comprise a range of manufacturing career pathways, including medical

equipment, metal trades, biotech, microfabrication; and establish a statewide assessment and certification system for the MTAG core manufacturing skills.

### **Want to Know More?**

For more information, contact Cindi Price at Shoreline Community College, 206-533-6715 or <cprice@ctc.edu>.

# Marine and Industrial Safety Training

Peninsula College

Initially, the Peninsula College Skill Panel was formed to assess safety training needs and update safety training curricula specific to the industrial and marine industries of the Olympic Peninsula in order to reduce injuries and costs associated with them. However, as with many skill panels, this panel made an important discovery. After surveying 79 businesses representing marine, corrections, construction, national parks, and manufacturing subsectors of metal and composites, timber and paper mills, and boat builders located in Clallam and Jefferson counties, it learned that many smaller businesses were deficient in providing any safety training to their employees, and several firms did not have a safety plan in place.

The skill panel then broadened its focus to educate these smaller businesses regarding the potential risks of not having effective safety plans and training available. By showing the urgency to correct safety measures, the Peninsula College workforce education staff was able to assess needs and customize safety training across a broader industry scope than the initial project planned.

## Results

- Safety training curricula created and revised for several companies located in Forks, Port Angeles, and Port Townsend.
- On-site safety training schedules offered for maximum business flexibility.
- Educational pamphlet for small businesses showing how to establish a simple and cost-effective safety plan and training created.
- Menu of incentives for safety planning and training, including lowered insurance rates and Labor and Industries compliance, was created and distributed.
- Many businesses contracted with Peninsula College to implement safety training programs. Panel members were instrumental in marketing the training program.
- Peninsula College became an involved safety and workforce training partner with the business community and the Clallam netWorks initiative.

## Next Steps

Skill panel outcomes and recommendations are being connected to the Marine Services cluster strategy for Clallam, Jefferson, and Kitsap counties as a pilot project of the Governor's Joint Economic Vitality Cabinet. This project will increase coordination among companies, their suppliers and institutions that support the marine industry, and will allow the industry to leverage its assets.

## Want to Know More?

For more information, contact Bob Lawrence at Peninsula College, 360-417-6344 or <bobl@pcadmin.ctc.edu>.

# Skill Member Roster

*Current as of December 2003*

## Industry Skill Panels

### Lake Washington Technical College— Game Software Development

Adrenium  
Amaze Entertainment  
Aquent  
Arena.netA  
Atari Humongous  
Bellevue Community College  
Black Ship  
Cascadia College  
Cat Daddy Games  
Cranky Pants-THQ  
DigiPen University  
Escape Factory  
Game House  
Griptonite  
KnowWonder  
Lake Washington Technical College  
Mesmer Animation Labs  
Microsoft  
Monolith  
Nintendo  
Outcast Studios  
Seattle-King County Workforce  
Development Council  
University of Washington  
Washington Software Alliance  
XYZ and You  
Zombie

### Peninsula College—Marine and Industrial Safety Training

Clallam County Economic Development Council  
Olympic Labor Council  
Pacific Rim Industrial and Marine Energy  
WorkSource

### Pierce County Careers Connection—Electronics

Bates Technical College  
Boeing  
Clover Park Technical College  
Communication Workers of America  
Intel Corp.  
Keyport Naval Undersea Workforce Center  
Lakewood Automotive Repair  
Multicare Health System  
Pierce College

Pierce County Careers Connection  
Executive Board  
Sound Energy Systems  
Southwest Washington Electrical  
Sumner School District  
Tacoma City Light  
Tacoma Community College  
Tacoma Technology Consortium  
Tacoma-Pierce County Economic  
Development Board  
West Sound Consortium

### Pierce County Careers Connection— Information Technology

AppTech, Inc.  
Bates Technical College  
City of Tacoma  
Click Network  
Clover Park Technical College  
Intel Corp.  
Labor Ready  
Lively and Partners Consulting Network, Inc.  
Local #37083  
McChord Airforce Base  
Pierce College  
Port of Tacoma  
Puyallup School District  
Russell Investment Group  
Sagem Morpho, Inc.  
Tacoma Community College  
Tacoma Power  
Tacoma School District  
University of Washington  
Washington Department of Transportation  
WashTech

### RATEC—Information Technology

Asix, Inc.  
AT&T Wireless  
Bellevue Community College  
Dragonfly Ventures  
Information Systems Management Group  
North Coast Electric  
Paccar  
REI  
Sogeti  
University of Washington  
Washington Dental Service  
Washington State University  
Weyerhaeuser

## **Shoreline Community College—Manufacturing**

Amgen  
Association of Washington Business  
Central Washington University  
Crane Aerospace  
Electro-Impact  
Ellison Machinery Northwest  
Fluke  
Freightliner  
Genie Industries  
GM Nameplate  
Kenworth Trucking Company  
Lake Washington Technical College  
Lower Columbia Community College  
Manufacturing Technology Advisory Group  
Medtronic Physio Control  
Mikron Industries  
New Market Skills Center  
Oberto Sausage  
Office of Senator Maria Cantwell  
Office of Superintendent of Public Instruction  
Philips Medical Systems Heartstream  
Puget Sound Center for Manufacturing Excellence  
Renton Technical College  
Seattle Jobs Initiative  
Shoreline Community College  
Starbucks  
Washington Manufacturing Services  
Washington State University  
Western Washington University

## **Tacoma—Pierce County Workforce Development Council—Construction**

Absher Construction  
Air Systems Engineering  
Associated General Contractors  
Bates Technical College  
Boeing  
City of Tacoma  
Clover Park Technical College  
Construction Industry Training Council  
Department of Labor and Industries  
Employment Security Department  
Pacific Northwest Regional Council of Carpenters  
Pierce College  
Pierce County Apprenticeship Consortium  
Pierce County Building and Trades Council  
Pierce County Careers Connection  
Pierce County Master Builders Association  
Puyallup School District  
Quality Telecommunications Services

Rushforth Construction  
S&W Utility  
Small Business Incubator  
Sound Transit  
Tacoma Community College  
Tacoma Housing  
Tacoma Plumbing and Heating  
Tacoma Public Schools  
University of Washington  
Western Washington Sheet Metal Joint Apprenticeship Training Committee  
Women's Employment and Education  
WorkFirst  
WorkSource

## **Walla Walla Community College—Energy**

Army Corps of Engineers  
Blue Mountain Action Council  
Bonneville Power Administration  
Columbia Rural Electric Association, Inc.  
Energy Facility Site Evaluation Council  
FPL Energy  
Inland Northwest Technology Education Center  
International Brotherhood of Electrical Workers  
Milton Freewater Electric Department  
Pacific Power  
Port of Walla Walla  
Teamsters Local #556  
Walla Walla Community College  
WorkSource

## **Health Care Skill Panels**

### **Benton—Franklin Workforce Development Council**

Benton-Franklin Community Health Alliance  
Benton-Franklin Health Department  
Benton-Franklin Workforce Development Council  
Blue Mountain Community College  
Carondelet Mental Health Services  
City University  
Columbia Basin College  
Group Health Cooperative  
Hanford Environmental Health Foundation  
Kadlec Medical Center  
Kennewick General Hospital  
Kennewick School District  
LaClinica Health Network  
Lourdes Health Network  
Lourdes Medical Center  
Math, Engineering, and Science Achievement  
Pasco School District  
Prosser Memorial Hospital  
Richland School District

**Benton–Franklin (cont.)**

Service Employees International Union  
Local #202  
Southeast Washington Labor Council  
Surgery Center  
Theresa Quezada  
Tri-Cities Cancer Center  
Tri-Cities Chaplaincy  
Tri-Cities Laboratory  
Tri-Cities Shared Services  
Tri-City Radiology  
Tri-County Economic Development District  
Tri-Tech Vocational Skills Center  
Washington State Nurses Association  
Washington State University  
WorkFirst  
WorkSource

**Eastern Washington Partnership Workforce Development Council**

Area Health Education Center  
Blue Mountain Action Council  
Blue Mountain Medical Group  
Buena Vista Care Facility  
Colville Confederated Tribes  
Community Colleges of Spokane  
Dayton Hospital  
Deer Park Hospital  
Family Medical Center  
Ferry County Memorial Hospital  
Garfield County Hospital Local #1001  
Intercollegiate Center for Nursing  
Kettle Falls School District  
Lincoln Hospital  
Mt. Carmel Hospital  
Newport Community Hospital  
Northeast Tri-County Health District  
Northeast Washington Health Programs  
Northeast Washington Medical Group  
Odd Fellows Home  
Odessa Memorial Hospital  
Park Manor Care Center  
Partnership for Rural Improvement  
Patterson Consulting Services  
Pinewood Terrace Nursing Home  
Pomeroy School District  
Port of Walla Walla  
Regency at the Park  
Rural Resources Community Action  
Spokane Community College  
St. Joseph Hospital  
St. Mary Medical Center  
Sunbridge Care  
Tri-County Economic Development District

Tri-State Hospital  
United Food and Commercial Workers  
Local #1001  
Walla Walla Clinic  
Walla Walla Community College  
Walla Walla County Health District  
Walla Walla General Hospital  
Walla Walla School District  
Washington State Penitentiary  
Washington State University  
Whitman County Health District  
WorkSource

**North Central Workforce Development Council**

Aging and Adult Care of Central Washington  
Big Bend Community College  
Central Washington Hospital  
Chelan-Douglas Public Health  
Columbia Valley Community Health  
Colville Tribal Health  
Community Choice Healthcare Network  
Coulee Community Hospital  
Family Health Center Dental Clinic  
Grant County Economic Development  
Labor and Industries Region 5/  
Apprenticeship Office  
Lake Chelan Community Hospital  
Mattawa Community Medical Clinic  
Mid-Valley Hospital  
Moses Lake Community Health  
North Central Educational Service District  
Nurses Local #141  
Okanogan Regional Home Health and Hospice  
Othello Community Hospital  
Port of Chelan  
Samaritan Healthcare  
SkillSource  
Triple C Healthcare  
Washington State University School of Nursing  
Wenatchee Valley College  
Wenatchee Valley Medical Center  
WorkSource

**Northwest Workforce Development Council**

Affiliated Health Services  
Bellingham Technical College  
East West Consulting  
Group Health Cooperative  
Interfaith Family Health Center  
Island Convalescent Center  
Island Hospital  
Madrona Medical  
Northwest Partnership for Workforce  
Development

## **Northwest (cont.)**

Northwest Workforce Development Council  
Sea Mar Clinic  
Skagit Valley College  
Skagit Valley Medical Center  
St. Francis Extended Care Facility  
St. Joseph Hospital  
Washington State Nurses Association  
Whatcom Community College  
Whidbey General Hospital

## **Olympic Workforce Development Council**

Belmont Terrace  
Bremerton School District  
Catholic Services  
Central Kitsap School District/Career  
and Technical Education  
Crestwood Convalescent Center  
Doctor's Clinic  
Dynacare Laboratories  
Encore  
Eton Technical College  
Extencicare  
Forks Community Hospital  
Frances Haddon Morgan Center  
Harbor House  
Harrison Hospital  
Jamestown S'Klallum Tribe  
Jefferson General Hospital  
Jefferson Mental Health Services  
Kah Tai  
Kitsap Dental Society  
Kitsap Home Care Services  
Kitsap Mental Health Services  
Liberty Shores  
Lower Elwha Klallum Tribe  
Martha and Mary Health Center  
North Peninsula Skills Center  
Northwoods Lodge  
Office of Senator Betti Sheldon  
Olympic Care and Rehabilitation Center  
Olympic College  
Olympic Health Care Alliance  
Olympic Medical Center  
Olympic Radiology  
Orchard Point  
Ostrom Management Services  
Peninsula College  
Peninsula Community Health Services  
Peninsula Dental Society  
Peninsula Mental Health  
PIP Printing  
Port Angeles Care Center  
Port Gamble S'Klallum Tribe

Quileute Tribe  
Ridgemont Terrace Convalescent Center  
Sequim School District  
Spectrum Healthcare Resources  
United Food and Commercial Workers  
International Union Local #381  
Virginia Mason Medical Center  
Washington Veterans Home  
West End Outreach  
West Sound Technical Skills Center  
WorkSource

## **Pacific Mountain Workforce Development Council**

Alpine Way  
Capital Medical Center  
Centralia College  
Choice Medical Network  
Employment Security Department  
Grays Harbor Central Labor Council  
Grays Harbor College  
Grays Harbor Community Hospital  
Grays Harbor Economic Development Council  
J. Grant Enterprise  
Mark Reed Hospital  
Mason General Hospital  
Morton General Hospital  
New Market Vocational Skills Center  
Office of Superintendent of Public Instruction  
Olympic College  
Pacific County Economic Development Council  
PacifiCorp  
Providence Centralia Hospital  
Providence St. Peters Hospital  
South Puget Sound Community College  
Thurston County Economic Development  
Council  
Washington Workforce Association  
Willapa Harbor Hospital

## **Seattle-King County Workforce Development Council**

Bellevue Community College  
Children's Hospital and Regional Medical Center  
Group Health Cooperative  
Harborview Medical Center  
Highline Community Hospital  
Overlake Hospital Medical Center  
Seattle Community College District  
Seattle Public Schools  
Seattle-King County Workforce Development  
Council  
Service Employees International Union  
Local #1199

**Seattle–King County (cont.)**

Shoreline Community College  
Swedish Medical Center  
University of Washington Medical Center  
University of Washington School of Nursing  
Virginia Mason Medical Center  
Washington State Hospital Association  
Washington State Nurses Association

**Snohomish County Workforce Development Council**

Cascade Valley Hospital  
Edmonds Community College  
Everett Community College  
Group Health Cooperative  
Northshore Group Health Medical Center  
Providence-Everett Medical Center  
Sea Mar Community Health Centers  
Snohomish County Economic Development Council  
Snohomish County Workforce Development Council  
Stevens Health Care  
Stevens Hospital  
Sun HealthCare Group  
The Everett Clinic  
United Staff Nurses Union Local #141  
University Center  
University of Washington  
Valley General Hospital  
WorkSource

**Spokane Area Workforce Development Council**

Area Health Education Center  
Central Valley School District  
Eastern State Hospital  
Eastern Washington University  
Empire Health Service  
Goodwill Industries  
Inland Empire Hospital Services Association  
Inland Northwest Health Services  
Inland Northwest Technology Education Center  
Intercollegiate Center for Nursing Education  
Jones Consulting  
Karen L. Michaelson and Associates  
North Idaho College  
Office of Senator Maria Cantwell  
Providence Services Eastern Washington  
Rockwood Clinic  
Sacred Heart Medical Center  
Shriner's Hospital  
Spokane Area Professional Technical Skills Center

Spokane Area Workforce Development Council  
Spokane College of Pharmacy  
Spokane Community College  
Spokane County Medical Society  
Spokane Regional Chamber of Commerce  
Spokane Regional Health District  
Spokane School District  
St. Luke's Rehabilitation Institute  
The Heart Institute  
United Food and Commercial Workers Local #1001  
VA Hospital  
Washington State University  
WorkSource

**Southwest Washington Workforce Development Council**

Cascade Park Care Center  
Clark College  
Columbia River Economic Development Council  
Cowlitz Economic Development Council  
Economic Development Task Force  
Employment Security Department  
Family Physicians Group  
Kaiser Permanente  
Legacy Health Systems  
Lower Columbia College  
Northwest Regional Training Center  
Providence Health Care Systems  
Southwest Washington Medical Center  
Southwest Washington Workforce Development Council  
St. John Medical Center  
Vancouver Clinic

**Tacoma–Pierce County Workforce Development Council**

Bates Technical College  
Clover Park Technical College  
Franciscan Health System  
Good Samaritan Community Healthcare  
Group Health Cooperative  
Madigan Army Medical Center  
ManorCare Health Services  
MultiCare Health System  
Pacific Lutheran University  
Pierce College  
Pierce County Careers Connection  
Rainier Vista Care Center  
Tacoma Community College  
Tacoma Lutheran Home and Retirement Community

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**Tacoma—Pierce County (cont.)**

Tacoma-Pierce County Employment  
and Training Consortium  
United Food and Commercial Workers  
Local #141  
University of Puget Sound  
University of Washington  
VA Puget Sound Health Care System  
Washington Association of Community  
and Migrant Health Centers  
Washington State Hospital Association  
WAVA/Puyallup School District  
Western State Hospital

**Tri-County Workforce Development Council**

Central Washington Family Medicine  
Heritage College  
Holtzinger Fruit  
Indian Health Services  
Kittitas Valley Community Hospital  
Klickitat County Hospital  
Laborer's International Union #614  
Memorial Hospital  
Providence Hospital  
Sunnyside Community Hospital  
United Brotherhood of Carpenters  
Yakima Schools Foundation  
Yakima Valley Community College  
Yakima Valley Farm Workers Clinic

# Workforce Training and Education Coordinating Board

*The Workforce Training and Education Coordinating Board is Washington State's valued and trusted source of leadership for the workforce development system.*

## Board Members

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*Representing Labor*

Terry Bergeson  
*Washington State Superintendent of Public Instruction*

Don Brunell  
*Representing Business*

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*Washington State Board for Community and Technical Colleges*

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*Representing Business*

Tony Lee  
*Representing Targeted Populations*

Asbury Lockett  
*Representing Business*

John McGinnis  
*Representing Labor*

Sylvia Mundy  
*Washington State Employment Security Department*

Beth Thew  
*Representing Labor*

## Participating Officials

Dennis Braddock  
*Secretary, State Department of Social and Health Services*

Vacant  
*Representing Local Elected Officials*

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Ellen O'Brien Saunders  
*Executive Director*



WASHINGTON STATE

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